

29. The method of claim 23, further comprising:

forming a layer of metal on the substrate before forming the first layer of spin-on glass; and

forming the first layer of spin-on glass on the layer of metal.

30. The method of claim 23, further comprising:

forming a layer of metal on the substrate before forming the first layer of spin-on glass;

depositing a second dielectric on the layer of metal before forming the first layer of spin-on glass; and

forming the first layer of spin-on glass on the second dielectric.

- 31. The method of claim 23 wherein depositing the first dielectric comprises performing a plasma-enhanced deposition of the first dielectric onto the first layer of spin-on glass.
- 32. The method of claim 23 wherein depositing the first dielectric comprises depositing an oxide onto the first layer of spin-on glass.
- 33. The method of claim 23 wherein depositing the first dielectric comprises depositing a low-temperature oxide onto the first layer of spin-on glass.
- 34. The method of claim 23, further comprising planarizing the first dielectric while planarizing the second layer of spin-on glass.
- 35. The method of claim 23, further comprising planarizing the first dielectric and the first layer of spin-on glass while planarizing the second layer of spin-on glass.
- 36. The method of claim 23 wherein planarizing the second layer of spin-on glass comprises etching back the second layer of spin-on glass.



37. The method of claim 23, further comprising:

wherein planarizing the second layer of spin-on glass comprises etching back the second layer of spin-on glass; and

etching back the first dielectric while etching back the second layer of spin-on glass.

38. The method of claim 23, further comprising:

wherein planarizing the second layer of spin-on glass comprises etching back the second layer of spin-on glass; and

etching back the first dielectric and the first layer of spin-on glass while etching back the second layer of spin-on glass.

- 39. A semiconductor structure, comprising:
- a substrate:
- a first layer of spin-on glass disposed on the substrate;
- a first dielectric disposed on the first layer; and
- a planarized second layer of spin-on glass disposed on the first dielectric.
- 40. The semiconductor structure of claim 39 wherein the first layer of spin-on glass comprises a siloxane-based spin-on glass.
- 41. The semiconductor structure of claim 39 wherein the first layer of spin-on glass comprises a polyimide spin-on glass.
- 42. The semiconductor structure of claim 39 wherein the first layer of spin-on glass comprises a polymethylmethacrylate spin-on glass.
  - 43. The semiconductor structure of claim 39, further comprising: a second dielectric disposed on the substrate; and wherein the first layer of spin-on glass is disposed on the second dielectric.